

Compiled By

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C MINES AND PROSPECTS - Numbered deposits have significant production, reserves, or potential; see table

reserves, or potential; see table

B - Barite

EXPLANATION

G - Building stone (granite)

K - Clay (kaolinite)

C - Coal
D - Diatomite

F - Feldspar

J - Gemstones (josephinite)
S - Gypsum (sulfate)

L - Limestone

M - Marble
P- 011 shale (petroleum)

O- Olivine

V - Pumice (volcanic ash)

Q- Silica (quartz)

DESCRIPTION OF MAP UNITS

VOLCANIC ROCKS OF THE HIGH CASCADE RANGE
(QUATERNARY AND TERTIARY)

TV

VOLCANIC ROCKS OF THE WESTERN CASCADE RANGE
(TERTIARY)

Ts

MARINE AND NON-MARINE SEDIMENTARY ROCKS
(TERTIARY)

KJg

ARINE AND NON-MARINE SEDIMENTARY
(TERTIARY)

KJg

GRANITIC ROCKS
(CRETACEOUS AND JURASSIC)

KJS

SEDIMENTARY ROCKS
(CRETACEOUS AND JURASSIC)

Jv

VOLCANIC ROCKS
(JURASSIC)

Jo

VOLCANIC ROCKS
(TRIASSIC AND PALEOZOIC)

MzPzm

METAMORPHIC ROCKS
(MESOZOIC AND PALEOZOIC)

INTRODUCTION

This map of non-metallic mineral deposits is compiled on a generalized geologic map of the Medford 1° by 2° quadrangle (Smith and others, 1982). Its purpose is to aid in land-use planning and in resource analysis by indicating where non-metallic deposits have been explored or mined (see table). Potential sources of nonmetallic minerals are summarized as follows.

NONMETALLIC MINERALS

Barite.--Sec. 29, T. 33 S., R. 7 W. (no published report).

Carbon dioxide.—Estimated recovery of 470 million ft³ through 1957. Soda water springs (not shown on map) near Ashland appear to warrant investigation should there be sufficient demand for dry ice (Wagner, 1969a, p. 200).

Clay.--Production for brick and tile plants only from clays in shale. Granitic rocks in southwestern Oregon are insufficiently weathered to have formed significant deposits of white-firing clay. Six or more deposits of red-firing clay (four of which are reported in MRDS and are shown on the map) are known (Mason, 1969a, p. 203-204).

Coal.--Eden Ridge (no. 1) field (no production) contains 50 million tons or more of coal ranked bituminous C. Rogue River field (includes no. 66 and other nearby coal occurrences) contains subbituminous coal that has been mined for local use. Camas Valley field (in Douglas County along the northern boundary of the quadrangle) contains small outcrops of subbituminous coal (Mason, 1969, p. 272-278).

Diatomite.--No production. Potential for finding minable quantities of filter grade is slight (Wagner, 1969b, p. 210).

Diopside.—No production. Should demand develop, pyroxenite in Oregon Mountain area (not shown on map) southwest of O'Brien may warrant investigation (Wagner and Ramp, 1969, p. 193).

Feldspar. -- Small production from pegmatite. There appears to be a potential for the production of feldspar sand from the Klamath Mountains, of which the western half of the quadrangle are a part (Ramp, 1969, p. 52).

Gemstones.—A few small diamonds were recovered from gold placers. The ophiolitic rocks could be hosts for diamonds (Mason, 1969b, p. 214). Spherulitic jasper (oregonite, medfordite, rogueite) has been produced from a limited supply in NE1/4 sec. 33, T. 37 S., R. 9 W. Josephinite (FeNi₃) is found in the placers of Josephine Creek southwest of Kerby (Oregon Department of Geology and Mineral Industries, 1942, p. 121).

Gypsum.--No production. An occurrence near Galice appears to offer no possibility of commercial development (Wagner and Withington, 1969,

Oil shale. -- Small production in the 1920's. Shale City deposit in sec. 16, T. 38 S., R. 2 E. contains 150,000 tons, testing 36.6 gal/ton (Newton, 1969a, p. 279).

Olivine.--No production. Dunite in secs. 2 and 12, T. 38 S., R. 10 W. and T. 30 S., R. 6 W. (not shown on map) is a potential source that may be exploited someday (Wagner and Ramp, 1969, p. 192).

Peat.—Small production for local use. Resources very incompletely known; most promising potential areas are outside the quadrangle (Cameron, 1969, p. 222).

Petroleum, natural gas.—No production. Riddle—Dayton well (not shown on

map) near the town of Riddle had a small flow of gas below 1,000 ft. Trigonia well (not shown on map) near Medford had an unconfirmed report of oil and gas shows above 2,257 ft (Wagner and Newton, 1969, p. 295, 297).

Pumice.—Small production. There are many areas containing pumice in the

Pumice.—Small production. There are many areas containing pumice in the northeastern corner of the quadrangle but only a few are favorably located (Wagner, 1969c, p. 225).

Saline water. -- No production. Wells (not shown on map) near Grants Pass, Medford, and Ashland are only moderately saline (3,518-8,640 ppm total dissolved solids) and are not considered to be a commercial supply of salt (Newton, 1969b, p. 231).

Serpentine.--No production. If its use in superphosphate fertilizer becomes popular, a very large supply is available from the ophiolite and Jurassic volcanic units in the quadrangle (Wagner and Ramp, 1969, p. 193).

Explanatory pamphlet accompanies map
Interior—Geological Survey, Reston, Va.—1985
For sale by Branch of Distribution, U.S. Geological Survey,
Box 25286, Federal Center, Denver, CO 80225

Silica.—Small production. High-purity quartz such as at the Bristol (no. 58), Quartz Mountain (T. 30 S., R. 2 E.), and Hugo (T. 35 S., R. 6 W.) deposits is limited. Lower grade silica is abundant in pre-Tertiary formations and alluvial accumulations (Ramp and Mason, 1969, p. 241).

exceeds demand (Mason, 1969c, p. 247, 260, 267).

Stone.—Crushed stone—Enormous reserves widely distributed. Limestone, marble—Large reserves of high grade material southwest of Grants Pass and Medford. Building stone—Several granite quarries are known in the south central part of the quadrangle. Ashland quarry (no. 70) produced over \$150,000,000 worth of granite. Supply

Talc (soapstone).--No production. There is some potential for production in the part of the quadrangle lying within the Klamath Mountains (Ramp, 1969, p. 52).

Oregon: Oregon Department of Geology and Mineral Industries Bulletin 64, p. 278-280.

1969b, Saline water, in Mineral and water resources of Oregon: Oregon Department of Geology and Mineral Industries Bulletin 64, p. 231-232.

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1969b, Diatomite in Oregon, in Mineral and water resources of Oregon: Oregon Department of Geology and Mineral Industries Bulletin 64, p. 208-210.

1969c, Perlite, pumice, pumicite, and cinders, in Mineral and water

resources of Oregon: Oregon Department of Geology and Mineral Industries Bulletin 64, p. 222-228.

Wagner, H. C., and Newton, V. C., Jr., 1969, Petroleum and natural gas, in Mineral and water resources of Oregon: Oregon Department of Geology and Mineral Industries Bulletin 64, p. 280-298.

Wagner, N. S., and Ramp, Len, 1969, Asbestos, olivine, and other magnesium silicate minerals, in Mineral and water resources of Oregon: Oregon Department of Geology and Mineral Industries Bulletin 64, p. 187-193.

Wagner, N. S., and Withington, C. F., 1969, Gypsum and anhydrite, in Mineral and water resources of Oregon: Oregon Department of Geology and Mineral Industries Bulletin 64, p. 214-218.